Polystyrene

Technical data sheet Flame Retardant Polystyrene Produced in Europe

Description

POLYSTYRENE (PS) COMPOUNDS (CPDS) FT876 is a high impact, halogen free flame retardant polystyrene with good thermal stability and process ability

Main Characteristics

- ✓ Bromine and Chlorine free
- ✓ UL94 V0 @ 2.5 mm.
- ✓ High heat and good thermal and UV stability

Applications

Television covers, decoders, Hi-Fi. Office automation.

Properties

Flammability rating	<u>Method</u>	<u>Unit</u>	<u>Value</u>
UL 94 V0 – Black and Grey		mm	2.5
Rheological			
Melt Flow index (200°C-5Kg)	ISO 1133H	g/10mn	3.0
<u>Thermal</u>			
Vicat softening point 50N (T° increase of 50°C/h)	ISO 306B50	°C	85
<u>Mechanical</u>			
Izod notched impact strength at 23°C	ISO 180/1A	KJ/m²	6.0
Tensile yield strength	ISO 527-2	MPa	30
Tensile strength at break	ISO 527-2	MPa	40
Elongation at break	ISO 527-2	%	40
Flexural modulus	ISO 178	MPa	2300
Miscellaneous			
Density at 23°C	ISO 1183	g/cm³	1.1
Moulding shrinkage		%	0.4 - 0.7
Water absorption	ISO 62	%	<0.1

Processing conditions

- Maximum melt temperature is 280°C, though typically 270°C is used.
- Under normal processing conditions, this grade is heat stable. However do not leave in barrel when moulding machine is idle. Always purge with clean natural PS, PP or any propriety purging compound.
- Ensure all fumes are extracted at source.

General information

- > Standard properties: All tests carried out at 23°C unless stated otherwise. Mechanical properties are measured on injection moulded tests specimens.
- > Bulk density: bulk density of all natural grades is approximately 0.6 g/cm3.

